



**CITY OF LODI
COUNCIL COMMUNICATION**

AGENDA TITLE: Adopt Resolution Amending Traffic Resolution 97-148 Approving Converting the Traffic Control at the Intersection of Tokay Street and Washington Street from a Two-Way Stop to a Multi-Way Stop and Approving the Installation of Stop Signs on Live Oak Way at Sweetwood Drive

MEETING DATE: December 17, 2003

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt a resolution amending Section 2 of Traffic Resolution 97-148 by approving converting the traffic control at the intersection of Tokay Street and Washington Street from a two-way stop to a multi-way stop and approving the installation of stop signs on Live Oak Way at Sweetwood Drive, as shown on Exhibit A.

BACKGROUND INFORMATION: Tokay Street and Washington Street - The intersection of Tokay Street and Washington Street has been studied based on our observation of increasing accidents and a recent citizen request for service. Currently, Washington Street traffic is controlled by stop signs at Tokay Street. Tokay Street traffic is not controlled.

Accident history for the period of over three-and-one-half years from 2000 to the present indicates that there has been an increase in failure-to-yield accidents at this intersection each year (see Exhibit B). These accidents occur when drivers on Washington Street fail to yield to Tokay Street traffic after stopping at the stop sign. Recent traffic volume counts indicate approximately 5,010 vehicles per day (vpd) enter the intersection from Tokay Street and 1,155 vpd enter the intersection from Washington Street. Land use adjacent to the intersection are all single-family residences.

A field review of the intersection indicates that parking demand on Tokay Street in the vicinity of Washington Street is relatively high. These parked vehicles create visibility problems for drivers entering Tokay Street from Washington Street. A particular problem observed during the field review was drivers being unable to see westbound vehicles on Tokay Street while stopped southbound on Washington Street due to a pickup and trailer that typically park at the corner. Accident reports also indicate the majority of the collisions that occurred at this intersection (70%) involved vehicles traveling in these directions.

Caltrans guidelines are used when considering the installation of multi-way stops. These guidelines consider accidents correctable with the installation of a multi-way stop, as well as vehicle and pedestrian volumes. The guidelines also recommend that traffic volumes be about equal on the intersecting streets. When installed at the intersection of high volume and low volume streets, drivers on the high volume street tend to disregard the stop sign due to the lack of cross street traffic. The minimum recommended traffic split is 60%/40%.

APPROVED:

H. Dixon Flynn, City Manager

Based on these guidelines, the number of correctable accidents occurring at the intersection are sufficient to consider a multi-way stop control; however, the traffic volume split of 80%/20% is not ideal for a multi-way stop (Exhibit C). In addition, the problem at this intersection appears to be mostly related to visibility problems created by parked vehicles. When visibility problems exist, we typically recommend eliminating street parking to improve visibility. However, because parking demand is high in this area, eliminating parking will displace vehicles into other neighborhood areas, which is likely to create problems with nearby residents.

Staff recommends that City Council approve converting the traffic control at this intersection from a two-way stop to a multi-way stop, as shown on Exhibit A. Two marked pedestrian crosswalks are recommended to be installed across Tokay Street at Washington Street.

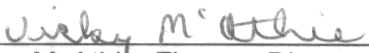
Live Oak Way and Sweetwood Drive - The intersection of Live Oak Way and Sweetwood Drive is a four-legged intersection, with the south leg being a cul-de-sac. There are no traffic controls at this intersection. Based on the Department's best practice, if the overall layout of the development is such that cross traffic would be infrequent, the intersection may be considered a three-legged intersection for traffic control purposes. Three-legged intersections in residential subdivisions are seldom controlled since the terminating street must yield before entering the through cross street. Although cross traffic in and out of the cul-de-sac on Live Oak Way is infrequent, due to the relatively long appearance of the cul-de-sac while traveling south at the intersection, some drivers may be unaware of the need to yield to Sweetwood Drive traffic.

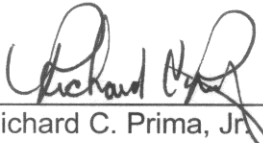
There has been only one right-angle accident at this intersection in the past three-year period. Staff considered a yield control; however, our field review of the intersection revealed that existing landscaping at the corners affects the ability of drivers on Live Oak Way to see approaching vehicles on Sweetwood Drive. A Safe Approach Study was performed, and it was determined that the landscaping affected visibility to the point a stop control is recommended.

Based on these factors, we recommend that City Council approve the installation of stop signs on Live Oak Way at Sweetwood Drive, as shown on Exhibit A.

FUNDING: Street Maintenance Account

The cost to convert the traffic control from a two-way stop to a multi-way stop at Tokay Street and Washington Street is approximately \$650. The cost for the installation of two stop signs and legends at Live Oak Way and Sweetwood Drive is approximately \$280.


Vicky McAthie, Finance Director


Richard C. Prima, Jr.
Public Works Director

RCP/RSK/pmf
Attachments

cc: City Attorney
Police Chief
City Engineer
Street Superintendent

Senior Traffic Engineer
Senior Civil Engineer Swimley
Concerned Citizens



CITY OF LODI

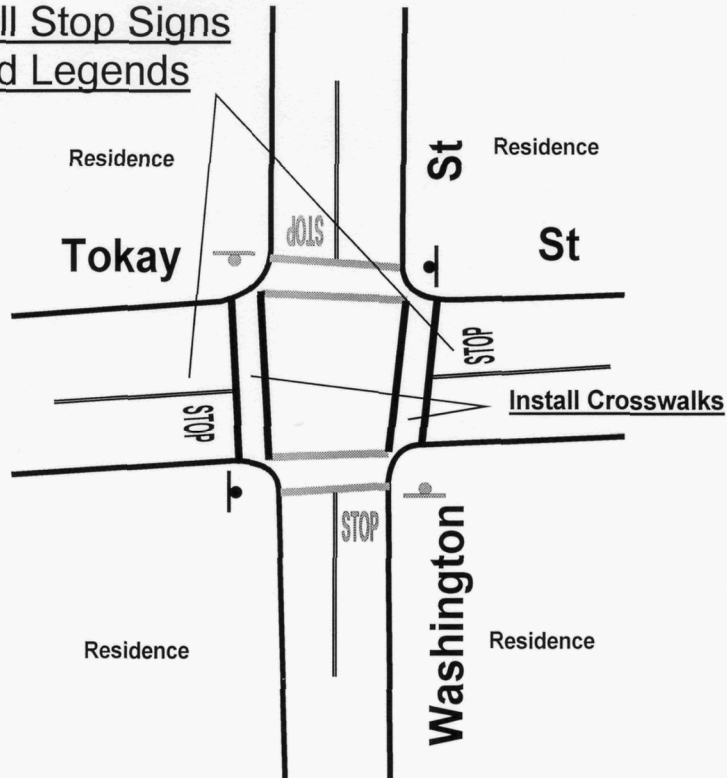
PUBLIC WORKS DEPARTMENT

Exhibit A

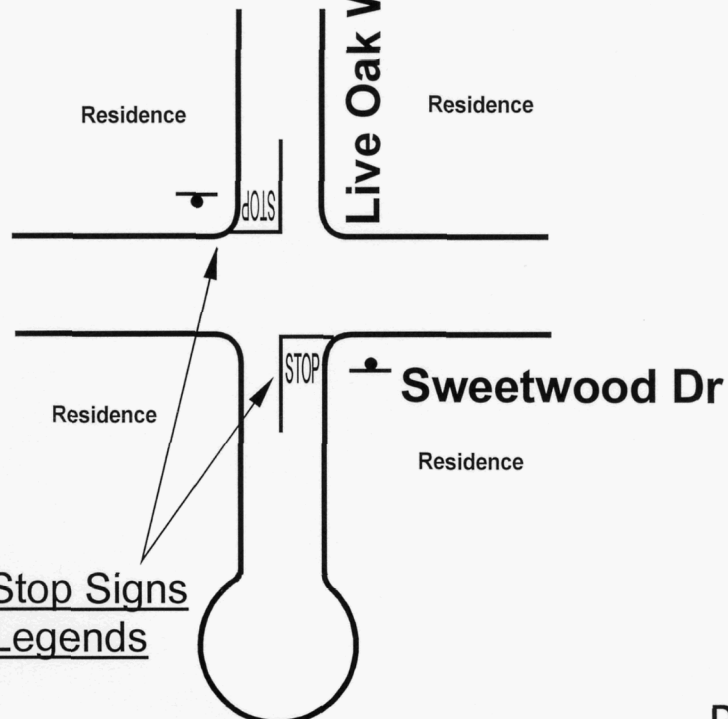
Tokay St at Washington St
Proposed Multi-Way Stop

Live Oak Wy at Sweetwood Dr
Proposed Two-Way Stop

Install Stop Signs
and Legends



Live Oak Wy



Install Stop Signs
and Legends

December 2003

PD#	No.	DATE	TIME	DAMAGE	INJURIES	APPARENT CAUSE (A)
00-166	1.	01/06/2000	0600	UNK-MIN	0	H&R
01-02060	2.	02/24/2001	2224	MOD-UNK	0	H&R
01-03342	3.	03/26/2001	1655	MIN-MIN	0	UNK. D-2 UNFAMILIAR WITH THIS AREA.
01-011171	4.	10/03/2001	2236	MIN-UNK	0	H&R
01-13642	* 5.	12/02/2001	1502	MOD-MOD	0	FAILURE TO YIELD
01-13766	* 6.	12/05/2001	1201	MOD-MOD	0	FAILURE TO YIELD D-2 72 YRS OLD
01-014376	* 7.	12/19/2001	1723	MOD-MOD	0	FAILURE TO YIELD D-1 THOUGHT IT WAS 4 WAY STOP
02-04975	* 8.	04/27/2002	1655	MOD-MOD	0	FAILURE TO YIELD
02-05204	9.	05/03/2002	1318	MOD-MOD	1	FAILURE TO YIELD
02-07010	* 10.	06/12/2002	1656	MAJ-MAJ	3	FAILURE TO YIELD D-1 DID NOT SEE D-2
02-08829	11.	07/26/2002	2038	UNK-MOD	0	H&R
02-10114	* 12.	08/24/2002	1719	MIN-MOD	1	FAILURE TO STOP
02-10151	* 13.	08/25/2002	0139	MOD-MOD	1	FAILURE TO YIELD
02-10912	* 14.	09/13/2002	0932	MAJ-MOD	0	FAILURE TO YIELD D-1 DID NOT SEE D-2
02-13278	* 15.	11/07/2002	0603	MIN-MIN	0	FAILURE TO YIELD
03-6062	16.	05/24/2003	1632	MOD-MOD	0	Unsafe speed, lost control turning onto Tokay
03-6063	* 17.	06/24/2003	0902	MIN-MAJ	0	Failure to yield by 73 year old driver
03-6064	* 18.	06/28/2003	1303	MOD-MOD	1	Failure to yield, did not see approaching vehicle
03-8795	* 19.	07/30/2003	0616	MOD-MIN	0	Failure to yield, did not see approaching vehicle
03-8982	20.	08/03/2003	1620	MIN-MIN	0	Unsafe backing
03-9134	* 21.	08/06/2003	1642	MOD-MOD	1	Failure to yield
03-12262	* 22.	10/17/2003	1256	MIN-MIN	0	Failure to yield, did not see approaching vehicle
	23.					
	24.					
	25.					
	26.					
	27.					
	28.					
	29.					
	30.					

* - Right angle collisions potentially eliminated by multi-way stop control.



CITY OF LODI
Public Works Department

Exhibit C

**MULTI-WAY STOP SIGN
WARRANTS**

INTERSECTION OF: Tokay Street and Washington Street

DATE: December 4, 2003 BY: R. Kiriu

Any of the following conditions may warrant a multi-way STOP sign installation.

1. Where traffic signals are warranted and the need is urgent, the four-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.

Satisfied _____ Not Satisfied X

2. An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a multi-way stop installation in a 12-month period. Types of accidents susceptible of correction include right angle and left turn collisions.

Time period 10/2002 - 10/2003
Total number of accidents 7

Number of correctible accidents 6
Satisfied X Not Satisfied _____

3. Minimum volume warrant:

- a. The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any eight hours of an average day, and

Hour	12-1	2-3	3-4	4-5	5-6	6-7	7-8	8-9
Major Street	322	325	392	385	373	345	313	310
Minor Street	72	67	70	91	96	102	90	84

Highest eight hours _____ a.m. to _____ p.m.
Total volume 3437 vehicles
Average per hour 430 vehicles

- b. The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same eight hours with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour.

Hour	12-1	2-3	3-4	4-5	5-6	6-7	7-8	8-9
Minor St Vehs	72	67	70	91	96	102	90	84
Pedestrians								

928 peds required (116 per hour)

Highest eight hours _____ a.m. to _____ p.m.
Average per hour 84 vehicles
Average per hour 0 peds (EST)
Average units per hour 84
Satisfied _____ Not Satisfied X

4. When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements.

85-percentile speed 32 MPH
Satisfied _____ Not Satisfied X

A four-way STOP sign installation is a useful traffic control measure when other available means of control are not adequate. It should not be used unless the volume of traffic on the intersecting roads is about equal and is undesirable at low volume intersections.

Traffic major street 81 %
Traffic minor street 19 %

Approved by: R. Kiriu *RK*

Warrant Satisfied: yes X no _____

ADOPTED FROM THE CALTRANS TRAFFIC MANUAL MULTI-WAY STOP SIGN POLICY

RESOLUTION NO. 2003-243

A RESOLUTION OF THE LODI CITY COUNCIL AMENDING
TRAFFIC RESOLUTION NO. 97-148 APPROVING THE
CONVERSION OF THE TRAFFIC CONTROL AT THE
INTERSECTION OF TOKAY STREET AND WASHINGTON
STREET FROM A TWO-WAY STOP TO A MULTI-WAY STOP
AND APPROVING THE INSTALLATION OF STOP SIGNS ON
LIVE OAK WAY AT SWEETWOOD DRIVE

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WHEREAS, a study has been prepared based on staff's observation of increasing accidents at the intersection of Tokay Street and Washington Street; and

WHEREAS, Washington Street traffic is currently controlled by stop signs at Tokay Street, and Tokay Street traffic is not controlled; and

WHEREAS, the intersection of Live Oak Way and Sweetwood Drive is a four-legged intersection, with the south leg being a cul-de-sac. There are no traffic controls at this intersection. A Safe Approach Study was performed and it was determined that the landscaping affected visibility to the point a stop control is recommended; and

WHEREAS, staff recommends the following actions:

- 1) converting the traffic control at the intersection of Tokay Street and Washington Street from a two-way stop to a multi-way stop, as shown on Exhibit A, with the installation of two marked pedestrian crosswalks across Tokay Street at Washington Street; and
- 2) the installation of stop signs on Live Oak Way at Sweetwood Drive as shown on Exhibit A.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lodi does hereby approve converting the traffic control at the intersection of Tokay Street and Washington Street from a two-way stop to a multi-way stop, as shown on Exhibit A, with the installation of two marked pedestrian crosswalks across Tokay Street at Washington Street; and

BE IT FURTHER RESOLVED that the City Council does hereby approve the installation of stop signs on Live Oak Way at Sweetwood Drive as shown on Exhibit A.

BE IT FURTHER RESOLVED that City of Lodi Traffic Resolution No. 97-148, Section 2, "Stop Intersections," is hereby amended as set out above.

Dated: December 17, 2003

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I hereby certify that Resolution No. 2003-243 was passed and adopted by the City Council of the City of Lodi in a regular meeting held December 17, 2003, by the following vote:

AYES: COUNCIL MEMBERS – Beckman, Hitchcock, Howard, Land, and Mayor Hansen

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None

A handwritten signature in black ink, appearing to read "Susan J. Blackston", with a stylized flourish at the end.

SUSAN J. BLACKSTON
City Clerk



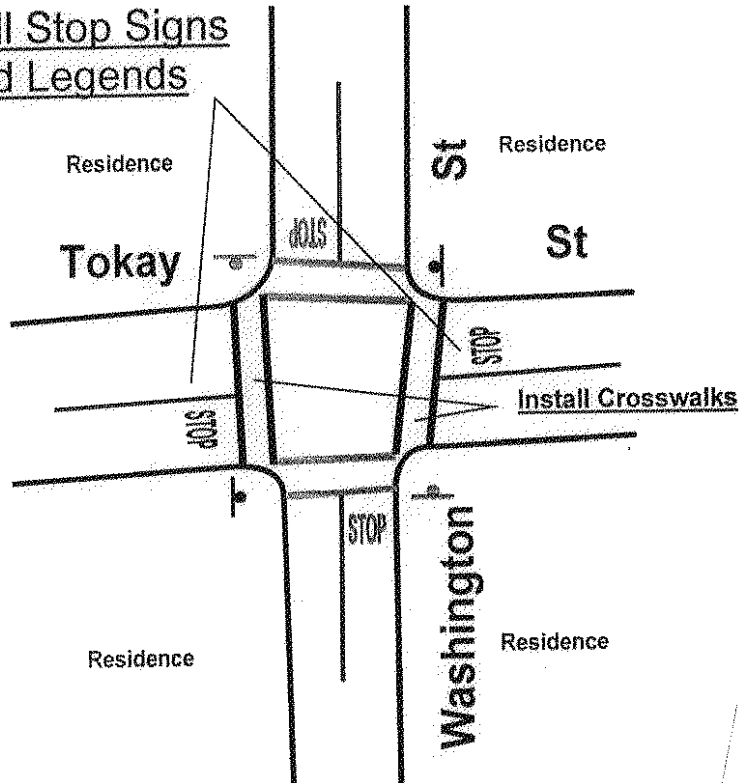
CITY OF LODI

PUBLIC WORKS DEPARTMENT

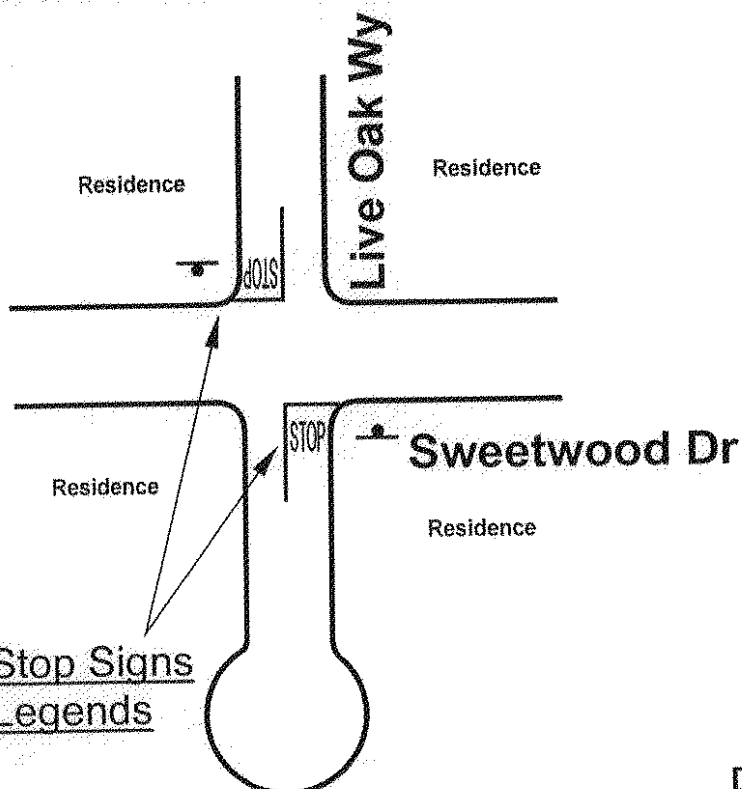
Tokay St at Washington St
Proposed Multi-Way Stop

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Install Stop Signs and Legends



Install Stop Signs and Legends



December 2003

CITY COUNCIL

LARRY D. HANSEN, Mayor
JOHN BECKMAN
Mayor Pro Tempore
SUSAN HITCHCOCK
EMILY HOWARD
KEITH LAND

CITY OF LODI
PUBLIC WORKS DEPARTMENT

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H. DIXON FLYNN
City Manager
SUSAN J. BLACKSTON
City Clerk
RANDALL A. HAYS
City Attorney
RICHARD C. PRIMA, JR.
Public Works Director

December 11, 2003

Concerned Citizens - *Mailing List Attached*

SUBJECT: Adopt Resolution Amending Traffic Resolution 97-148 Approving
Converting the Traffic Control at the Intersection of Tokay Street and
Washington Street from a Two-Way Stop to a Multi-Way Stop and
Approving the Installation of Stop Signs on Live Oak Way at
Sweetwood Drive

Enclosed is a copy of background information on an item on the City Council agenda of
Wednesday, December 17, 2003. The meeting will be held at 7 p.m. in the
City Council Chamber, Carnegie Forum, 305 West Pine Street.

This item is on the consent calendar and is usually not discussed unless a
Council Member requests discussion. The public is given an opportunity to address
items on the consent calendar at the appropriate time.

If you wish to write to the City Council, please address your letter to City Council,
City of Lodi, P. O. Box 3006, Lodi, California, 95241-1910. Be sure to allow time for the
mail. Or, you may hand-deliver the letter to City Hall, 221 West Pine Street.

If you wish to address the Council at the Council Meeting, be sure to fill out a speaker's
card (available at the Carnegie Forum immediately prior to the start of the meeting) and
give it to the City Clerk. If you have any questions about communicating with the
Council, please contact Susan Blackston, City Clerk, at 333-6702.

If you have any questions about the item itself, please call Rick Kiri, Senior
Engineering Technician – Traffic, at 333-6800, extension 2668.

R. Prima

for: Richard C. Prima, Jr.
Public Works Director

RCP/pmf

Enclosure

cc: City Clerk

Stan Buchmiller
300 E. Tokay Street
Lodi, CA 95240

Gary Regan
2815 Sweetwood Drive
Lodi, CA 95242